



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,830	01/23/2002	Andrea Brasch	Muller-6-1	9096

7590 05/07/2003

BROWNING BUSHMAN P.C.
Suite 1800
5718 Westheimer
Houston, TX 77057-5771

EXAMINER

ILDEBRANDO, CHRISTINA A

ART UNIT	PAPER NUMBER
----------	--------------

1725

DATE MAILED: 05/07/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/054,830

Applicant(s)

BRASCH ET AL.

Examiner

Christina Ildebrando

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-30, 32-36 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 31, 37 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892).
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948).
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152).
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

In this case, the disclosure of 09/269,989 is drawn to an invention distinct from the invention claimed in 10/054,830. The disclosure of 09/269,989 provides no support for the subject matter disclosed and claimed herein.

2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Germany on May 10, 1996. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1725

4. Claims 22-26, 28-30, 32-34, 36, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 669 162.

EP 0 669 162 discloses a process for preparing silica alumina carriers. The silica alumina carrier can be obtained by a process comprising: (a) mixing an aluminum compound with a silicon compound to obtain a solution, said aluminum compound being chosen from among aluminum alcoholate and aluminum carboxylate, and said silicon compound being chosen from among silicon alcoholate and siloxane compounds; (b) hydrolyzing the solution from step (a) under acidic conditions at a temperature between 50 and 150 degrees C; (c) cooling the mixture to obtain a gel; (d) processing the gel such as by drying; (e) extruding; and (f) calcining the extrudates at a temperature between 300 and 700 degrees C (page 2, lines 30-45). In an example, the mixture is hydrolyzed by heating under reflux for 4 hours at 85 degrees C (Example 1). This is considered to meet the embodiments where the hydrothermal aging is carried out during the hydrolysis.

It is taught by the reference that it is suitable to use Al and Si alcoholates wherein each alcoholate group has from 1 to 4 carbon atoms (page 2, lines 55-60). The use of acetic acid during the hydrolysis step is exemplified (Example 1).

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by EP 0 669 162.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1725

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 669 162 as applied to claims 22-26, 28-30, 32, 34, 36, and 38-40 above, and further in view of JP 1-197311.

The teachings of the EP reference are as described above.

The difference between the reference and the claims is that the reference does not disclose that the organosilicon compound is pre-hydrolyzed, as required by claim 27.

JP 1-197311 discloses a process for preparing an alumina-silica powder by hydrolyzing silicon and aluminum compounds. The JP reference teaches that the silicon compound is advantageously partially hydrolyzed in advance with an amount of water in the range of 0.5 to 3 moles per mole of silicon (pages 4-5 of the English translation).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method taught by the EP reference to include the pre-hydrolysis step of the JP reference in light of the suggestion by the JP reference that such pre-hydrolysis is important in order to hydrolyze the silicon and aluminum compounds more easily.

Claim Rejections - 35 USC § 102/103

7. Claim 50 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of EP 0 669 162 or Meyer et al. or White et al. or Noweck et al.

EP 0 669 162 discloses alumina silica carriers which have been calcined. Refer to page 2 and Example 1.

Meyer et al. (US 5,045,519) discloses a catalyst carrier based on aluminosilicates. The aluminosilicates have a high chemical purity with a silica content of 0.5-50% by weight and a homogeneous distribution of the alumina and silica is obtained (column 1, lines 60-70). The aluminosilicates prepared are dried to an anhydrous state (example 1).

White et al. (US 3,933,621) discloses a catalytic cracking process using a silica alumina catalyst. The catalyst is calcined to convert the precursor into a final catalyst comprising the synthetic silica alumina (column 6, lines 10-15). Refer to table 2 for weight concentrations of alumina.

Noweck et al. (US 5,883,272) discloses a hydrothermally treated aluminum silicate with 20% by weight silica which is calcined (column 6, lines 52-56).

The disclosed products of the prior art references and the instantly claimed product appear to be essentially the same and are comprised of the same components. In the event any differences can be shown for the product of the product-by-process claim 50 as opposed to the product taught by the prior art, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). Also, when the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to applicant to establish that their

Art Unit: 1725

product is patentably distinct and not the examiner to show the same process of making. *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

Allowable Subject Matter

8. Claims 31, 37, and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a process for manufacturing dispersible alumino-silicates in which the acid is added after the hydrolysis and prior to hydrothermal treatment, as required by claim 31. The prior art of record further does not teach or suggest a process wherein the aluminum alcoholates have saturated C6 to C8 hydrocarbon residues, as required by claim 37, or wherein the silicon alcoholates have saturated hydrocarbon residues as required by claim 41.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (703) 305-0469. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

CAI
May 2, 2003



TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700